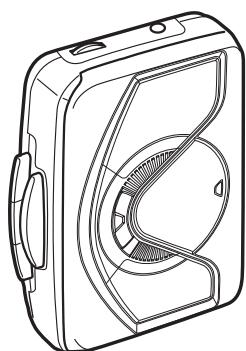




HS-TA204

YH,YJ,YL,YZ



SERVICE MANUAL

STEREORADIO
CASSETTE PLAYER

BASIC TAPE MECHANISM : 4ZM-2 P13NF
4ZM-2 P13NC

- This Service Manual is the "Revision Publishing" and replaces "Simple Manual",
(S/M Code No. 09-002-428-9T1).

aiwa
S/M Code No. 09-003-428-9R1

REVISION

DATA

SPECIFICATIONS

Frequency range: FM: 87.5 - 108 MHz
YJ,YH,YZ: AM: 530 - 1605 KHz
Maximum output: YL: AM: 530 - 1710 KHz
YL,YH,YJ: 15 mW + 15 mW (EIAJ/32 ohms)
YZ: 4 mW + 4 mW (EIAJ/16 ohms)
Power source: DC 3V using two R6 (size AA) batteries.
YH: AC house current using the optional AC adaptor AIWA AC-D302
Maximum dimensions: 92.0 (W) x 116.4 (H) x 39.0 (D) mm
($3\frac{5}{8}$ x $4\frac{5}{8}$ x $1\frac{9}{16}$ in.)
Weight: Approx.131 g (4.6 oz) (excluding batteries)

• Design and specifications are subject to change without notice.

ACCESSORIES / PACKAGE LIST

REF.NO.	PARTNO.	KANRI NO.	DESCRIPTION
1	8A-HRM-902-010	IB,YJ (ECC)	-IN<YJ>
1	8A-HRM-901-010	IB,YL (ESP)	-IN<YL;YL1>
1	8A-HRM-904-010	IB,YZ (EDPOHCZ)	-IN<YZ>
1	8A-HRM-903-010	IB,YZ (EGFSI)	-IN<YZ>
1	8A-HRM-905-010	IB,YH (ECC)	-IN<YH>
2	84-447-019-310	CLIP,BELT	
3	87-B30-145-210	HEADPHONE, HP-M029 (T)	<EXCEPT YL>
3	87-B30-081-110	HEADPHONE, HP-M009 (S)	<YL>

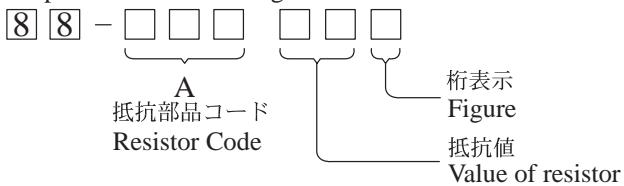
ELECTRICAL MAIN PARTS LIST

REF.NO.	PARTNO.	KANRI NO.	DESCRIPTION	REF.NO.	PARTNO.	KANRI NO.	DESCRIPTION
IC				C107	87-A11-733-080	C-CAP,S 1-16 Z F	
	87-A21-387-040	C-IC,TA2145F		C108	87-A11-551-080	C-CAP,S 1000P-50 K B	
	87-A20-851-040	C-IC,TA2111F		C109	87-016-462-080	C-CAP,S 1-16 F	
				C110	87-010-196-080	CHIP CAPACITOR,0.1-25	
				C111	87-010-196-080	CHIP CAPACITOR,0.1-25	
TRANSISTOR				C112	87-A11-569-080	C-CAP,S 0.012-50 K B	
	87-A30-159-080	C-TR,KTA1298Y		C113	87-A11-569-080	C-CAP,S 0.012-50 K B	
	87-026-261-080	CHIP-TR,RN1404		C114	87-A11-584-080	C-CAP,S 0.033-16 K B	
	87-026-262-080	C-TR,RN1407		C115	87-A11-584-080	C-CAP,S 0.033-16 K B	
				C116	87-015-688-040	E/CAP 4.7UF 35V TAPG	
DIODE				C117	87-010-452-080	CAPACITOR,1-16	
	87-020-027-080	CHIP-DIODE 1SS184		C118	87-A11-551-080	C-CAP,S 1000P-50 K B	
	87-A40-630-040	C-DIODE RB411D<YH>		C119	87-010-503-040	CAP,E 220-4 GAS	
				C128	87-012-140-080	CAP 470P	
				C130	87-012-140-080	CAP 470P	
MAIN C.B				C131	87-012-153-080	C-CAP,S 120P-50 CH	
	87-A90-988-010	FLTR,KMFC5153 T6-Z		C132	87-010-150-080	C-CAP,S 6P-50 CH	
BPF101	87-A91-680-010	FLTR,GFMB5-C3		C136	87-010-315-080	C-CAP,S 27P-50 CH<YH>	
C1	87-A11-553-080	C-CAP,S 1500P-50 K B		C401	87-016-460-080	C-CAP,S 0.22-16B<EXCEPT YL>	
C2	87-A11-553-080	C-CAP,S 1500P-50 K B		C401	87-012-393-080	C-CAP,S 0.22-16K<YL>	
C5	87-010-500-040	CAPE 33-4		C402	87-016-460-080	C-CAP,S 0.22-16B<EXCEPT YL>	
C6	87-015-675-040	CAP,E 33-6.3 M SRA		C402	87-012-393-080	C-CAP,S 0.22-16 K<YL>	
C7	87-A11-565-080	C-CAP,S 8200P-50 K B		C403	87-A11-718-080	C-CAP,S 0.1-25 Z F	
C8	87-A11-565-080	C-CAP,S 8200P-50 K B		CF101	87-A91-087-010	FLTR,PFS 450A6 B	
C11	87-A11-733-080	C-CAP,S 1-16 Z F		J1	85-HRL-623-010	JACK,3.5 ST BLK	
C12	87-A11-733-080	C-CAP,S 1-16 Z F		J2	87-A61-124-010	JACK,DC DIA2.75 BLKTC<YH>	
C13	87-A11-554-080	C-CAP,S 1800P-50 K B		L1	87-A50-538-010	COIL,1UH RF CHOKE	
C14	87-A11-554-080	C-CAP,S 1800P-50 K B		L2	87-005-849-080	COIL,10UH(CECS)	
C15	87-015-676-040	E/CAP 47/6.3		L101	8A-HRJ-607-010	BAR-ANT,MW (KTR)	
C16	87-A11-718-080	C-CAP,S 0.1-25 Z F		L102	8A-HRJ-606-010	COIL,FM RF	
C17	87-A11-733-080	C-CAP,S 1-16 Z F		L103	8A-HRJ-605-010	COIL,FM OSC	
C21	87-A10-489-040	CAP,E 220-4 7L SR		L104	87-A50-534-010	COIL,270UH AMOSC	
C22	87-A10-489-040	CAP,E 220-4 7L SR		L105	87-A90-663-010	IFT,MW 5L H6.4	
C23	87-A10-489-040	CAP,E 220-4 7L SR		PVC101	87-A91-707-010	TUN-CAP,20P-160P16X16	
C24	87-A11-726-080	C-CAP,S 0.33-16 Z F		R51	87-022-335-080	C-RES,S180-1/10W F<EXCEPT YH>	
C25	87-A11-726-080	C-CAP,S 0.33-16 Z F		R51	87-A00-530-080	C-RES,S180-1/10W F<YH>	
C51	87-A11-733-080	C-CAP,S 1-16 Z F		SFR51	87-024-197-010	SEMI-FIXEDRESISTOR, 1K	
C101	87-010-147-080	C-CAP,S3P-50CH<EXCEPT YL>		SW1	87-A90-133-110	SW,LEAF LSA1120JAU	
C101	87-010-146-080	CHIP CAP 2PF<YL>		SW2	87-A90-216-010	SW SL 2-2-3 SK230	
C102	87-012-150-080	C-CAP,S 20P-50 CH		VR1	87-A90-981-010	VR,RTRY 20KBX1	
C103	87-012-159-080	C-CAP,S24P-50CH<EXCEPT YZ>		FRONT C.B			
C103	87-010-315-080	C-CAP,S 27P-50 CH<YZ>		SW401	87-A90-330-080	C-SW,SL 1-1-2 SSSS81	
C104	87-010-145-080	C-CAP,S 1P-50 CH<YL>					
C104	87-010-147-080	C-CAP,S3P-50CH<EXCEPT YL>					
C105	87-A11-566-080	C-CAP,S 0.01-25 K B					
C106	87-A11-729-080	C-CAP,S 0.47-25 Z F					

○チップ抵抗部品コード／CHIP RESISTOR PART CODE

チップ抵抗部品コードの成り立ち

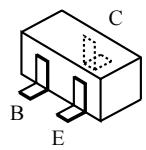
Chip Resistor Part Coding



チップ抵抗 Chip resistor

容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法/Dimensions (mm)				抵抗コード : A Resistor Code : A
				外形/Form	L	W	t	
1/16W	1005	± 5%	CJ		1.0	0.5	0.35	104
1/16W	1608	± 5%	CJ		1.6	0.8	0.45	108
1/10W	2125	± 5%	CJ		2	1.25	0.45	118
1/8W	3216	± 5%	CJ		3.2	1.6	0.55	128

TRANSISTOR ILLUSTRATION



RN1404

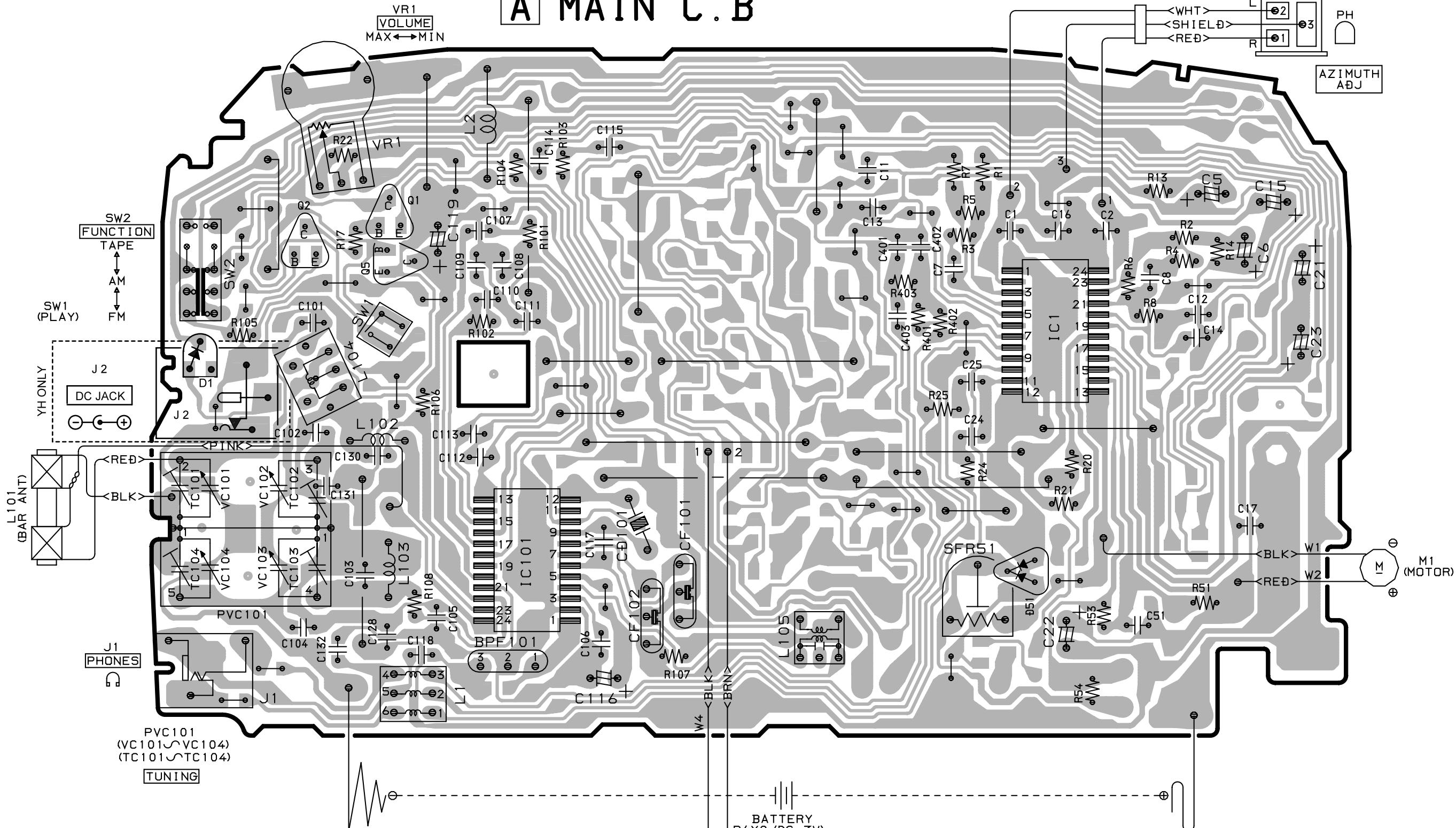
RN1407

KTA1298

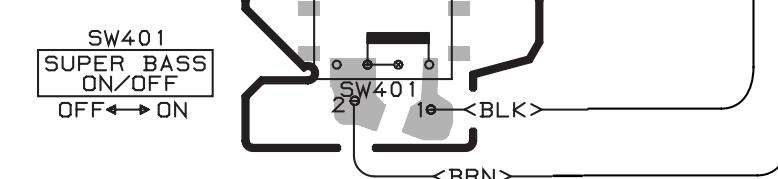
WIRING

32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

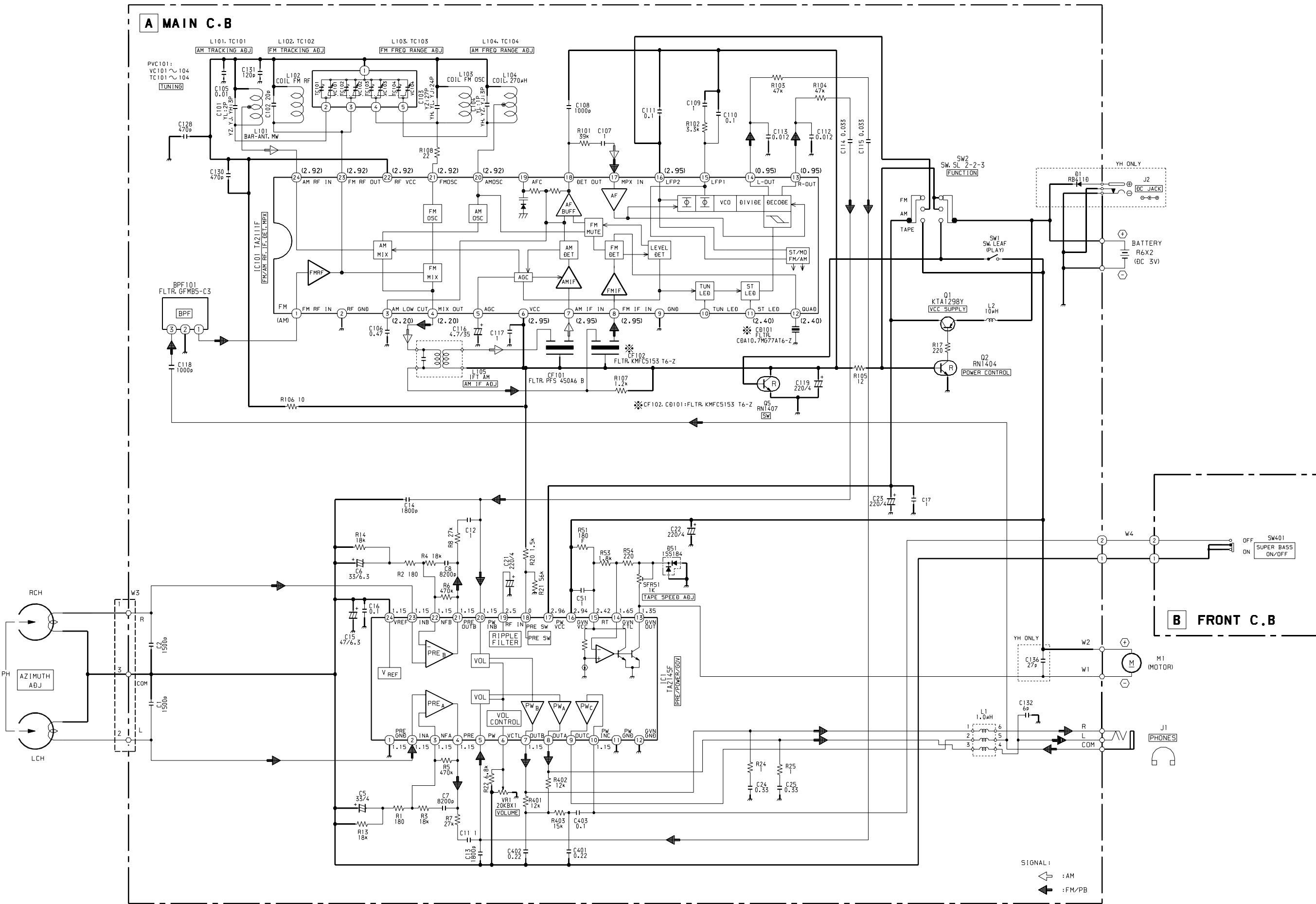
A MAIN C.E



B FRONT C. B

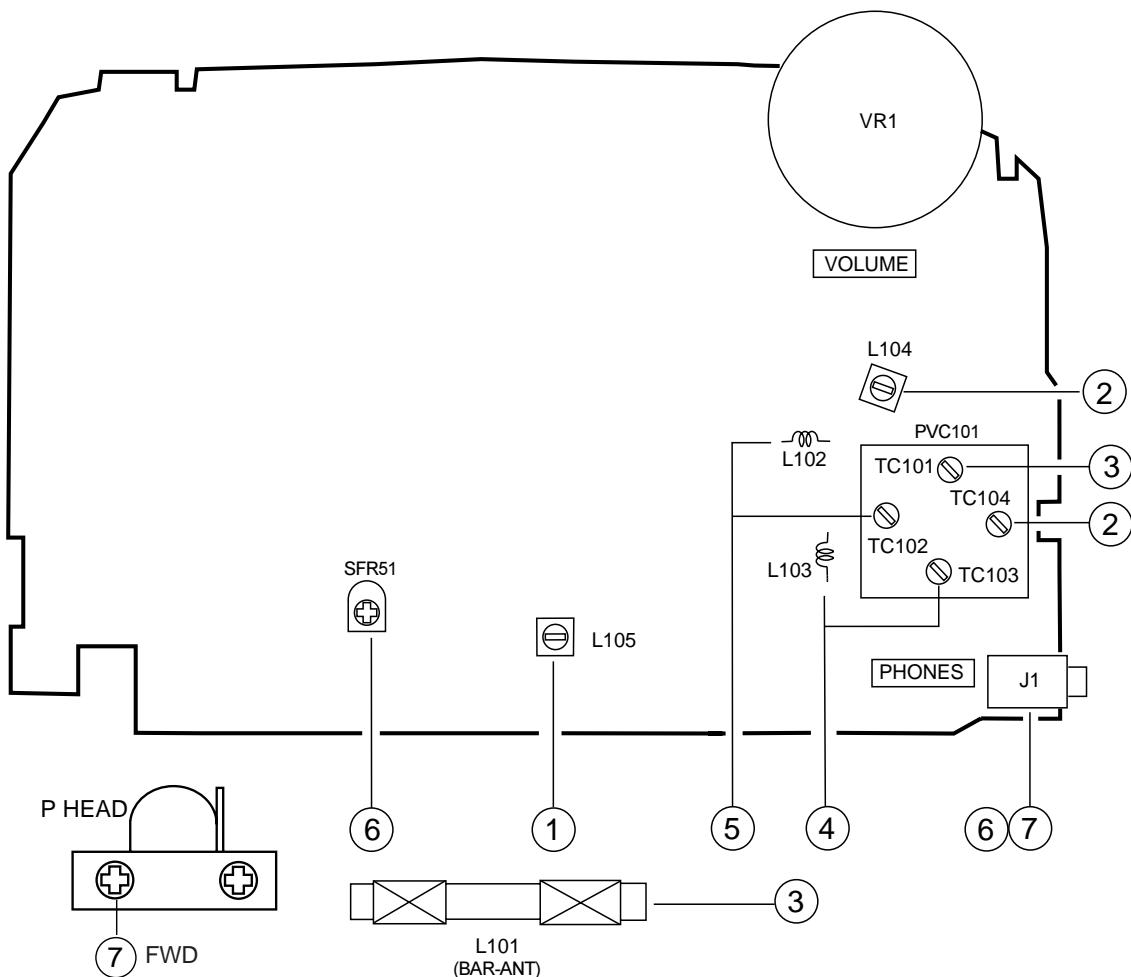


SCHEMATIC DIAGRAM



ADJUSTMENT

[A] MAIN C.B



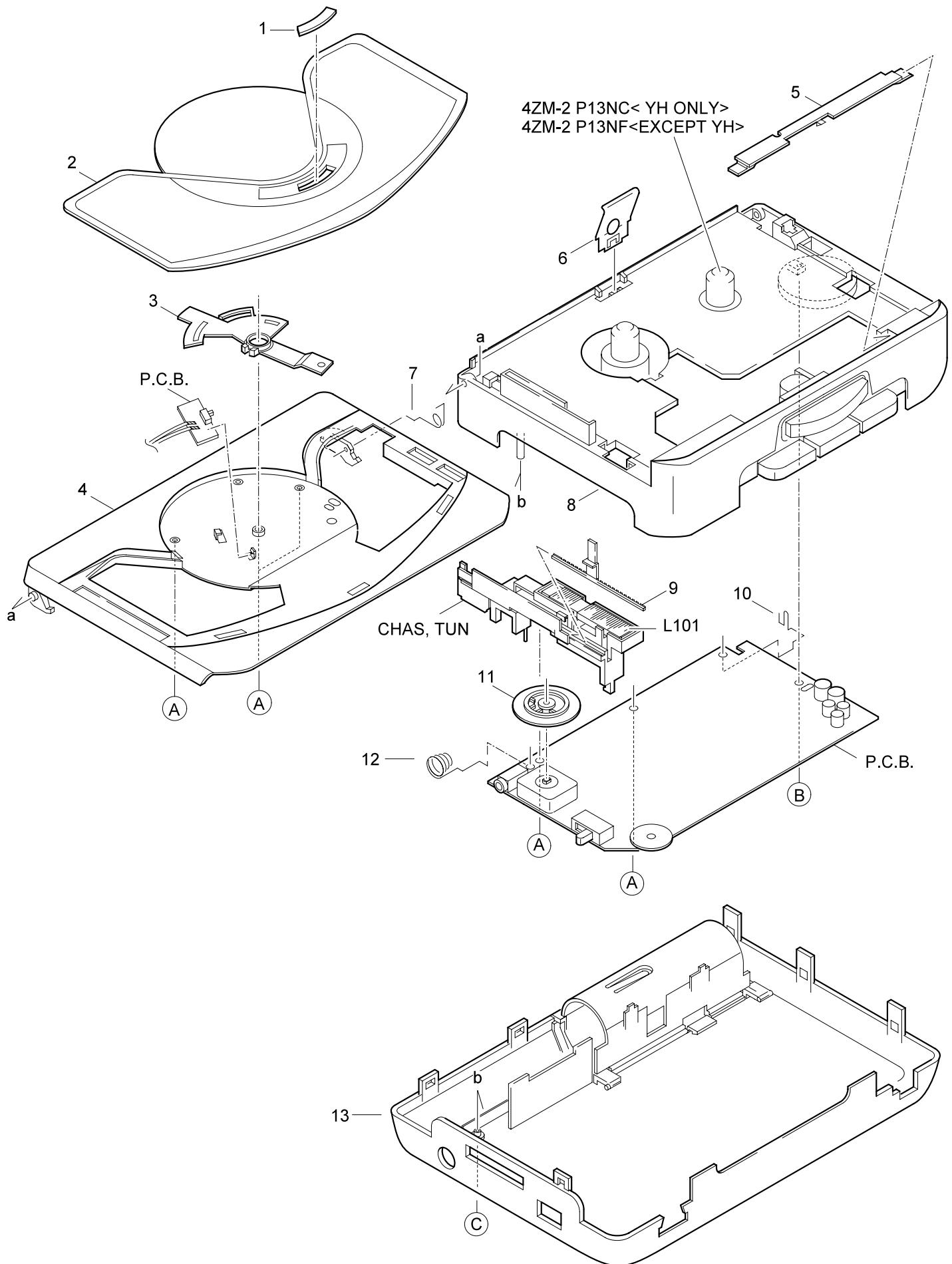
<TUNER SECTION>

1. AM IF Adjustment
L105 455kHz
2. AM Frequency range Adjustment
L104 $517\text{kHz} \pm 5\text{kHz}$ <YL>
L104 $515\text{kHz} \pm 5\text{kHz}$ <EXCEPT YL>
TC104 $1775\text{kHz} \pm 10\text{kHz}$ <YL>
TC104 $1670\text{kHz} \pm 10\text{kHz}$ <EXCEPT YL>
3. AM Tracking Adjustment
L101 600kHz
TC101 1400kHz
4. FM Frequency range Adjustment
L103 $87.4\text{MHz} \pm 0.05\text{MHz}$ <YZ>
L103 $87.0\text{MHz} \pm 0.1\text{MHz}$ <EXCEPT YZ>
TC103 $109.0\text{MHz} \pm 0.1\text{MHz}$ <EXCEPT YZ>
TC103 $108.3\text{MHz} \pm 0.05\text{MHz}$ <YZ>
5. FM Tracking Adjustment
L102 88.0MHz
TC102 108.0MHz

<TAPE PLAYER SECTION>

6. Tape Speed Adjustment
Settings : • Test tape : TTA-100 (Tape center)
• Test point : PHONES JACK (J1)
• Volume : NON-CLIP (MAX-10dB)
• Function : TAPE
• Adjustment location : SFR51
Method : Play back the test tape and adjust SFR51 so that the frequency becomes $3000\text{Hz} \pm 10\text{Hz}$ (FWD). Then confirm WOW is less than 0.50%.
7. Head Azimuth Adjustment
Settings : • Test tape : TTA-330/TTA-420
• Test point : PHONES JACK (J1)
• Volume : MAX
• Function : TAPE
• Adjustment location : Head azimuth adjustment screw
Method : Play back the 8kHz signal of the test tape and adjust the screw so that the output becomes maximum.

MECHANICAL EXPLODED VIEW 1 / 1



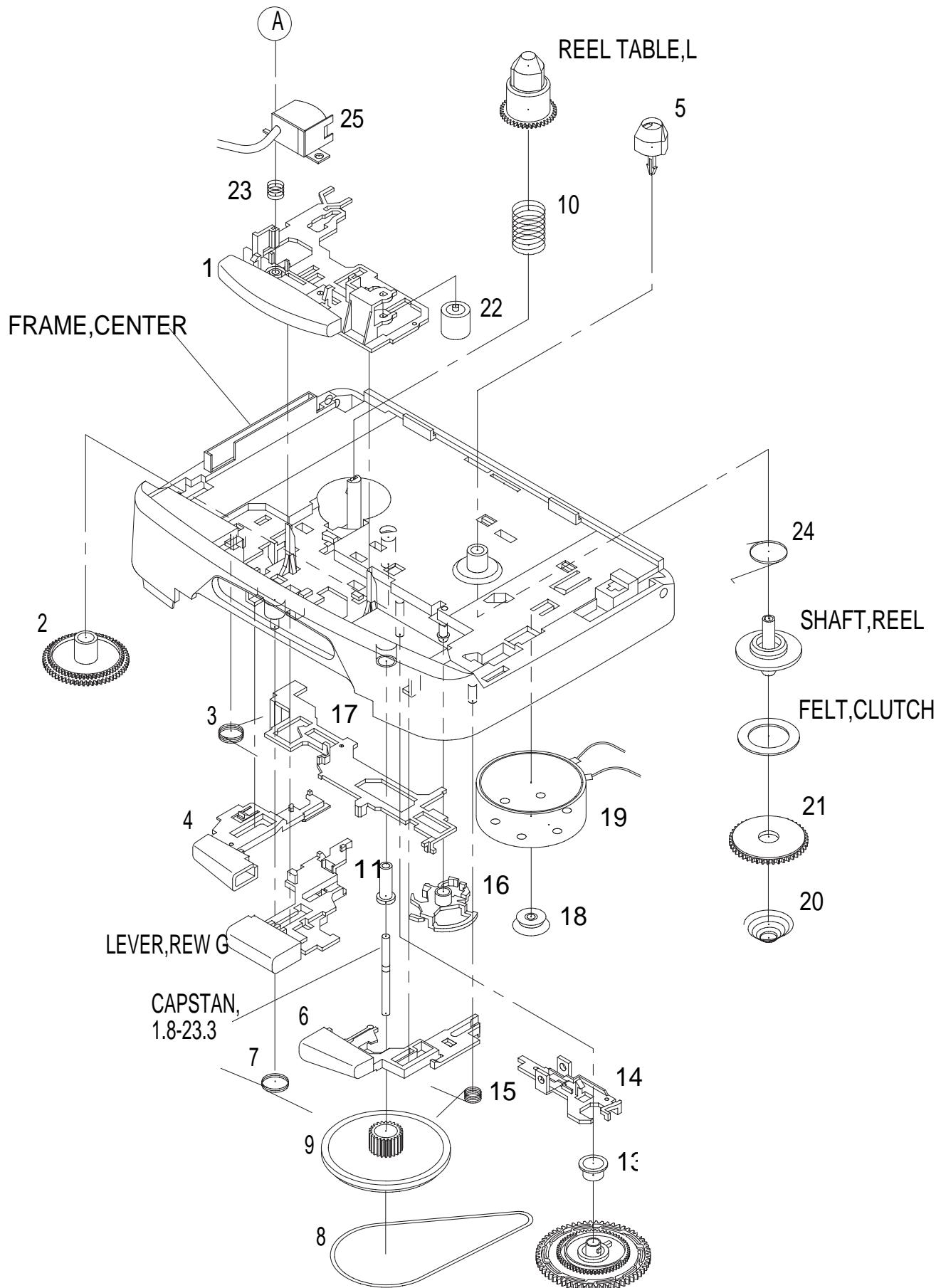
MECHANICAL PARTS LIST 1 / 1

REF.NO.	PARTNO.	KANRI NO.	DESCRIPTION
1	8A-HKA-003-010		KNOB, SL SBASS
2	8A-HRM-005-010		PANEL, CASS YJ<[S]YJ, [LM]YJ, YH>
2	8A-HRM-002-010		PANEL, CASS YU<YL, [S]YL>
2	8A-HRM-004-010		PANEL, CASS YZ<[S]YZ, [LM]YZ>
2	8A-HRM-011-010		PANEL, CASS YZS<[GM]YZ, [DM]YZ>
3	8A-HRM-003-010		PLATE, INDICATOR
4	8A-HRM-006-010		LID, CASS MBLU<[LM]YJ, [LM]YZ>
4	8A-HRM-007-010		LID, CASS MGRE<[GM]YZ>
4	8A-HRM-008-010		LID, CASS MORN<[DM]YZ>
4	8A-HRM-001-010		LID, CASS SIL<YL, [S]YZ, [S]YJ, [S]YL>
4	8Z-HRM-084-010		LID, CASS YH165 SIL<YH>
5	87-HRM-206-010		PLATE, HEAD J034<YL, [S]YZ, [S]YJ, [DM]YZ, [S]YL, YH>
5	88-HKB-205-010		PLATE, HEAD J240B<[LM]YJ, [LM]YZ>
5	88-HKB-204-010		PLATE, HEAD J266G<[GM]YZ>
6	8A-HRL-202-010		SPR-P, CASS<EXCEPT YH>
6	81-HK9-208-210		SPR-P, CASS A<YH>
7	86-HRM-205-010		SPR-T, CLICK
8	88-HRJ-038-010		FRAME, CENTER J034<YL, [S]YZ, [S]YJ, [DM]YZ, [S]YL, YH>
8	88-HKA-027-010		FRAME, CENTER VIO<[LM]YJ, [LM]YZ>
8	88-HKA-029-010		FRAME, CENTRE GRE<[GM]YZ>
9	86-HRM-009-210		POINTER, TUN
10	86-HRM-202-010		BAT-CONTACT, (+)
11	86-HRM-006-010		KNOB, RTRY TUN
12	8Z-HRM-205-010		BAT, CONTACT (-)
13	8Z-HRM-061-010		CABI, REAR ASSY MBLU<[LM]YJ>
13	8A-HRL-065-010		CABI, REAR ASSY MBLU YZ<[LM]YZ>
13	8A-HRL-066-010		CABI, REAR ASSY MGRE YZ<[GM]YZ>
13	8A-HRL-067-010		CABI, REAR ASSY MORN YZ<[DM]YZ>
13	8Z-HRM-058-010		CABI, REAR ASSY SIL<YL, [S]YJ, [S]YL>
13	8A-HRL-064-010		CABI, REAR ASSY SIL YZ<[S]YZ>
13	8Z-HRM-007-010		CABI, REAR YH<YH>
A	87-067-732-010		TAPPING SCREW, VT1.4-3
B	87-B10-044-010		V+1.7-6.5
C	87-067-691-010		SCREW VT+1.7-6

COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Silver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange	GM	Metallic Green
YMM	Metallic Yellow	DM	Metallic Orange		

TAPE MECHANISM EXPLODED VIEW 1 / 1



TAPE MECHANISM PARTS LIST 1 / 1

REF.NO.	PARTNO.	KANRI NO.	DESCRIPTION
1	84-ZM2-012-110		LEVER,PLAY G
2	84-ZM2-211-110		GEAR,CONNECT
3	84-ZM2-222-110		SPR-T,PLAY
4	84-ZM2-015-110		LEVER,STOP G
5	84-ZM2-216-210		REEL TABLE,R
6	84-ZM2-013-110		LEVER,FF G
7	84-ZM2-223-110		SPR-T,REW STOP
8	84-ZM2-232-310		BELT,MAIN
9	84-ZM2-221-110		FLY-WHL,P2
10	84-ZM2-228-310		SPR-C,BT
11	84-ZM2-220-110		BRG,P
12	84-ZM2-210-210		GEAR,AUTO
13	84-ZM2-218-110		CAP,GEAR AUTO
14	84-ZM2-208-510		LEVER,SHIFT
15	84-ZM2-224-110		SPR-T,FF LOCK
16	84-ZM2-207-310		LEVER,AUTO
17	84-ZM2-206-410		LEVER,LOCK
18	84-ZM2-219-010		PULLEY,MOTOR
19	87-A91-379-010		MOT,BCY3B-13
20	84-ZM2-226-510		SPR-C,CLUTCH
21	84-ZM2-212-010		GEAR,CLUTCH
22	84-ZM2-233-110		ROLLER ASSY,PINCH
23	84-ZM2-227-310		SPR-C,AZIMUTH
24	84-ZM2-225-010		SPR-T,AUTO FIND
25	87-A91-529-010		HEAD,TC-950
A	84-ZM2-252-010		S-SCREW,AZI-2-6.4 C<P13NC>
A	84-ZM2-242-010		S-SCREW,AZ1-2-6.4<P13NF>



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